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Introduction: Endovascular aneurysm repair (EVAR) is the dominant treatment strategy for Abdominal Aortic Aneurysms. Several large RCTs have demonstrated early survival benefits when compared to open surgical repair. However long-term outcome data is limited. The aim of this study was to investigate long-term outcomes following EVAR in Scotland.
Methods: Retrospective analysis of surveillance data, between Jan 2001-Dec 2012, in the four main Vascular Units was performed. Patients were identified locally and imaging data was collected by manually searching a combination of databases. Primary outcome measures included operative mortality, aneurysm-related mortality and all-cause mortality. Secondary outcome measures included long-term graft-related complications and re-intervention.
Results: Data was available for 569 patients. All centres had data available for a minimum of 5 continuous years. Mean patient age was 75.6years, 89% were male. Mean follow-up was 36.3months. 138 patients were recorded to be cease of which 19 died from aneurysm-related causes. 30day mortality was 1.2%, aneurysm related mortality and all-cause mortality at 5-years were 4.5% and 33.5%, respectively. Complications and re-intervention report at 5-years were 44.2% and 11.2%.
Conclusions: Operative mortality, aneurysm-related mortality and all-cause mortality in Scotland are similar to previously published data. Complication rates were also comparable; however re-intervention rate were lower.

0383: OUTCOMES FOR SURGICAL AND ENDOVASCULAR REVISION PROCEDURES IN ARTERIOVENOUS FISTULAE: STEVENAGE EXPERIENCE

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Introduction: To assess the AV fistula patency rate after 1 year following surgical and endovascular revision procedures
Methods: A retrospective case-note review was performed on patients identified from theatre and vascular access databases as having undergone revision procedure for upper arm and forearm AV fistulae. Patency at 1 year is defined as successful dialysis after one year from the revision procedure.
Results: 27 cases were reviewed over a 16-month period. 14 cases underwent endovascular revision and 13 cases underwent open surgical repair. Indications for revision in endovascular cases were: Venous outflow stenosis (n= 12), Juxta-anastomotic anastomosis (n=2). Indications in Surgical cases were: Failure to Mature (n=5), Clotted Fistula (n=4), Stenosis (n=4). Types of fistulae revised: RCF (n=14), BCF (n=13). Types of surgical procedures used: Tying off tributary vessels (n=2), Thrombectomy (n=3), Revision/higher anastomosis (n=5), interposition synthetic graft (n=2), Superficialization (n=1). Outcomes of Revision: Endovascular Cases: Technical Success rate: 13/14 (92.6%), Patency rate at 1 year:11/14 (78.5%). Surgical Cases: Technical Success rate: 11/13 (84%), Patency rate at 1 year:11/13 (84%). Total Success rate:22/27 (81.5%). Total patency rates: 20/27 (74%)
Conclusions: The outcomes outlined in this review prove the effectiveness of endovascular means in salvaging AV fistulae and highlights the fact endovascular management is possibly underused in thrombosed fistulae.

0460: A TWELVE-YEAR REPORT OF IATROGENIC VASCULAR INJURIES: IS VASCULAR CENTRALISATION SAFE?

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Introduction: Iatrogenic vascular injuries are often cited as a mitigating factor against centralisation of vascular surgery. The aim of this study is to examine the trend and pattern of iatrogenic vascular injuries in a tertiary referral centre.
Methods: Cases were identified from a prospectively collected departmental operative registry from 2000 to 2011. Operative and case notes were reviewed to determine the nature of injuries and their management.
Results: Ninety-six cases were identified from 9001 vascular procedures performed over twelve years. The number of iatrogenic vascular injuries increased from 11 cases (2000-2003) to 47 cases (2008 - 2011). Most referrals were from interventional radiology (26%) and cardiology (25%). Urgent vascular surgical input in theatre was required on twenty occasions, predominantly from general surgery and orthopaedics, followed by urology and gynaecology. Twelve injuries were sustained at other hospitals. Of these, three patients required urgent transfer to our unit and tow received treatment locally.
Conclusions: Iatrogenic vascular injuries are increasingly common and form a significant part of emergency admissions. This appears to be associated with a arise in minimally invasive procedures. Referrals from other hospitals were few, suggesting that iatrogenic vascular injuries should not be a deterrent to centralisation of vascular services.

0527: ROUTINE CHEST X-RAYS ARE NOT REQUIRED AFTER PLACEMENT OF TOTALLY IMPLANTED VENOUS ACCESS DEVICES (TIVADS)

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Introduction: To audit the number of immediate post-operative chest complications reported in patients undergoing image-guided insertion of a TIVAD without routine post-insertion chest x-rays.
Methods: Retrospective analysis of a prospective database of patients who underwent image-guided (US-guided central venous puncture and fluoroscopy-guided catheter placement) TIVAD insertion from 1st April 2011 to 31st December2013 inclusive.
Results: 27 patients (22 female, 5 males) underwent day case image-guided TIVAD insertion (Titajet light II Contrast; pfm medical, Stockport, Cheshire, UK) via right jugular (n=19), left jugular (n=7), and left subclavian (n=1) approaches. No patient had post-operative chest x-rays as a routine. 1 patient had a negative x-ray due to discomfort. There were no pre-discharge chest complications or complications of misplaced catheters on clinical grounds.
Conclusions: Use of image guidance during central venous catheter insertion has been shown to decrease complication rates; indeed, NICE have issued guidance that such should be performed under US guidance. Post-operative x-ray is used to check the position of the catheter and for any haemothorax or pneumothorax. The effective combination of US-guided insertion and fluoroscopy -guided catheter placement - our standard approach - as described in this audit, suggests no need for routine check post-procedure chest x-ray.

0552: SYSTEMATIC REVIEW OF PERIOPERATIVE OUTCOMES FOLLOWING LAPAROSCOPIC ABDOMINAL AORTIC ANEURYSM REPAIR

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Introduction: To collate information in the literature regarding perioperative outcomes following elective laparoscopic abdominal aortic aneurysm repair, to better inform decision-making.
Methods: Electronic databases were searched and a systematic review of the literature was performed. 1256 articles were screened, from which 8 studies were included. Perioperative outcomes which were analysed included overall mortality at 30 days, inpatient stay, ITU stay and re-interventions and complications within 30 days.
Results: In the totally-laparoscopic repair of infra-renal aneurysms (n = 203), thirty-day mortality ranged between 3-6% and in the laparoscopic-assisted cases (n = 497), this ranged between 0-7%. In-patient stay ranged from 5-10 days with an average ITU stay of 1-2 days, and 4-7 days with average ITU stay of 1-14 days respectively. Of the totally-laparoscopic group, 6-30% of cases were converted to open repair, with a 6% reintervention rate, whereas the rates were 5-10% and 3% respectively in the laparoscopic-assisted cases.
Conclusions: The outcomes from these studies demonstrate that laparoscopic repair of aortic aneurysms is comparable in safety to open repair. It remains unclear, however, whether there are marked advantages of this method compared with open and EVAR. Further training and research from high-output centres will enable firmer conclusions to be drawn.

0553: FORECASTING AORTIC ANEURYSM RUPTURE – A SYSTEMATIC REVIEW OF SEASONAL AND ATMOSPHERIC ASSOCIATIONS

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